21. A method according to claim 20, wherein said first and said second signal frames contain identical information.

22. A method according to claim 19, wherein said mobile station performs said measurement step.

23. A method according to claim 19, wherein, in said measuring step, the difference in time is measured between the reception in said mobile station of a second common control signal frame transmitted on said common control channel from said at least one neighboring base station and the reception in said mobile station of a first common control signal frame transmitted on said common control channel from said first base station.

24. A method according to claim 19, comprising the further step of calculating, based on the result of said measuring step, said second time offset.

25. A method according to claim 19, comprising the further step of transmitting frames on said first communication link in a compressed mode, wherein information is transmitted during a first part of a compressed mode frame and information is not transmitted during a second part of said compressed mode frame; and wherein said measuring step is performed during said second part of said compressed mode frame.

26. A method according to claim 25, comprising the further step of returning to non-compressed mode transmission, wherein information is transmitted during the whole frame.

27. A method according to claim 19, wherein said first signal frame is received within a first predetermined time period and said second signal frame is received within a second predetermined time period in said mobile station, said second predetermined time period occurring in consecutive order after said first predetermined time period.

28. A method according to claim 27, wherein said first and second predetermined time period each corresponds to a rake window.

29. A method according to claim 27, wherein said first and second signal frames are transmitted in a compressed mode on said first and second call link, respectively, said first signal frame being transmitted during a first part of a compressed mode frame and said second signal frame being transmitted during a second part of said compressed mode frame.

30. A method according to claim 29, wherein said first predetermined time period corresponds to said first part of a compressed mode frame in said mobile station and said second predetermined time period corresponds to said second predetermined time period in said mobile station.

31. A method according to claim 30, wherein said at least one neighboring base station and said first base station transmit on said communication links on different frequencies.

32. A method of code division multiple access for cellular communication systems wherein signals are transmitted according to a frame structure including signal frames, said method comprising the steps of:

broadcasting control signal frames containing information intended for any mobile station on a first control channel and on at least one second control channel;

providing a first communication link to a mobile station;

specifying a first time offset to be used to offset a time of transmission of first signal frames on said first communication link relative to transmission of first control signal frames on said first control channel;

measuring a difference in time between the reception in said mobile station of a second control signal frame transmitted on said at least one second control channel and the reception in said mobile station of a first control signal frame transmitted on said first control channel;

specifying at least one second time offset to be used to offset a time of transmission of second signal frames on a new communication link to said mobile station relative to transmission time of second control signal frames on said second control channel;

initiating said new communication link to said mobile station;

delaying transmission of a second signal frame on said new communication link so that said second time offset is retained;

delaying transmission of a first signal frame on said first communication link so that said first time offset is retained;

transmitting said first signal frame on said first communication link and said second signal frame on said new communication link; and

receiving said first and second signal frames in said mobile station.

33. The method of code division multiple access according to claim 32, comprising the further step of periodically updating at least one of said first time offset and said second time offset.

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